

Application No.: 10/625,898

Docket No.: 30014456-2 US (1509-427)

Amendments to the Abstract:

Please substitute the attached Abstract of the Invention for the abstract filed with the application.

Abstract of the Invention

Using a plurality of relatively narrowband light sensors having overlapping response characteristics, accurate and self-calibrating colour measurements are performed. With sufficient measurements, simultaneous equations can be solved to derive a light intensity measurement at portions of the spectrum where the overlapping sensor responses intercept. Using LEDs as light sensors provides cheap narrowband sensors. The LEDs also illuminate a sample to provide additional cross-reference measurements. The sensors and/or illumination sources have faces directed at several angles to improve sensing accuracy by mitigating the effects of surface texture and/or fluorescence.